

## **ABSTRACT**

A circuit for controlling an ignition coil that attenuates the feed forward voltage by slowing the initial turn-on of the coil driver is disclosed. The turn-on circuit includes a control signal input node, a capacitor, a resistor, a diode, and a coil driver. The control signal input node receives a coil control signal from an ignition control system. The capacitor begins charging as the control signal is received by the turn-on circuit. As the capacitor charges it gradually increases the voltage provided to the coil driver. The rate of the increase in voltage is controlled by the selection of the resistor and capacitor. The slowing of the initial turn-on of the coil driver has the effect of attenuating the feed forward voltage. The attenuating of the feed forward voltage minimizes degradation of the spark gap while allowing the elimination of the high voltage zener diode.